

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-013585**Date Inspected:** 30-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

|                                    |              |           |            |                                  |            |           |            |
|------------------------------------|--------------|-----------|------------|----------------------------------|------------|-----------|------------|
| <b>CWI Name:</b>                   | Xu Xian Ping |           |            | <b>CWI Present:</b>              | <b>Yes</b> | <b>No</b> |            |
| <b>Inspected CWI report:</b>       | <b>Yes</b>   | <b>No</b> | <b>N/A</b> | <b>Rod Oven in Use:</b>          | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Electrode to specification:</b> | <b>Yes</b>   | <b>No</b> | <b>N/A</b> | <b>Weld Procedures Followed:</b> | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Qualified Welders:</b>          | <b>Yes</b>   | <b>No</b> | <b>N/A</b> | <b>Verified Joint Fit-up:</b>    | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Approved Drawings:</b>          | <b>Yes</b>   | <b>No</b> | <b>N/A</b> | <b>Approved WPS:</b>             | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
|                                    |              |           |            | <b>Delayed / Cancelled:</b>      | <b>Yes</b> | <b>No</b> | <b>N/A</b> |
| <b>Bridge No:</b>                  | 34-0006      |           |            | <b>Component:</b>                |            |           |            |

**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Daniel Barrentine was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

This QA Inspector performed Phased Array Ultrasonic Testing (PAUT) following the guide lines of UT procedure titled "Phased Array Ultrasonic Testing for the Detection and Sizing of Suspected Planar Discontinuities (Cracks) in PJP Welds, # UT 04-0120F4 PJP Rib Weld" after ZPMC welding personnel performed weld repairs of tacked areas of the Partial Joint Penetration (PJP) welds joining u-ribs to deck plate. The deck panels examined are as follows:

DPMU2-001-012: 1 tack weld location found compliant and 0 tack weld locations found non-compliant.

This inspector performed conventional ultrasonic inspections, UT, on DPMU2-001-012, for determination of lack of penetration, LOP, after acceptance by ZPMC UT personnel. No further LOP was observed.

This inspector noted that training panel MU1-001 was cut into two separate panels in preparation for training on the transverse splice welding of deck panels. No welding was performed on this date.

This inspector noted welding of U- rib stiffeners into deck panel U- ribs labeled DP3135A-001. The welders were identified as 203805 and 201788.

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## WELDING INSPECTION REPORT

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This inspector noted welding of U- rib stiffeners into deck panel U- ribs labeled DP3138A-001. The welders were identified as 059378, 059416, and 059355.

This inspector noted welding of U- rib stiffeners into deck panel U- ribs labeled DP3133-001. The welders were identified as 062265 and 059378.

The welding procedure, WPS, for the above mentioned U- rib stiffener welding was identified as WPS-B-T-2233-Tc-U4B-F. The ZPMC QC for these operations was identified as Chen Shigang.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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| <b>Inspected By:</b> | Barrentine,Daniel | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Carreon,Albert    | QA Reviewer                 |

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